

CLAIMS

1. A method for configuring a network node that is connected in a dual ring, said method comprising:

5 receiving ring connection polarity information from a first adjacent node in said dual ring, said ring connection polarity information comprising a ring connection polarity state configured at said first adjacent node and an indication whether said ring connection polarity state is fixed or floating; and

if said ring connection polarity state configured at said first adjacent node is fixed,
10 adopting said ring connection polarity state of said first adjacent node.

2. The method of claim 1 further comprising:

if said ring connection polarity state configured at said first adjacent node is fixed,
transmitting said ring connection polarity information to a second adjacent node
15 including said adopted ring connection polarity state and an indication that said adopted ring connection polarity state is fixed.

3. The method of claim 1 further comprising:

if said ring connection polarity state configured at said first adjacent node is
20 floating, adopting a default ring connection polarity state.

4. The method of claim 3 further comprising:

if said ring connection polarity state configured at said first adjacent node is floating, transmitting an indication of said default ring connection polarity state to a second adjacent node along with an indication that said default ring connection polarity state is floating.

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5. The method of claim 3 further comprising:

operating said network node within said dual ring in accordance with said adopted ring connection polarity state.

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6. The method of claim 5 wherein operating said network node comprises operating said network node in accordance with DPT/SRP.

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7. The method of claim 5 wherein receiving said ring connection polarity information comprises:

receiving a path trace message; and

extracting said ring connection polarity information from said path trace message.

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8. Apparatus for operating a network node connected in a dual ring, said apparatus comprising:

a first interface in two-way communication with a first adjacent node in said dual ring, said first interface receiving ring connection polarity information from said first adjacent node, said ring connection polarity information comprising a ring connection

polarity state configured at said first adjacent node and an indication whether said ring connection polarity state is fixed or floating;

a second interface in two-way communication with a second adjacent node in said

5 dual ring; and

a network node controller that, if said ring connection polarity state configured at said first adjacent node is fixed, adopts said ring connection polarity state of said first adjacent node.

10 9. The apparatus of claim 8 wherein if said ring connection polarity state configured at said first adjacent node is fixed, said second interface transmits said ring connection polarity information to said second adjacent node including said adopted ring connection polarity state and an indication that said adopted ring connection polarity state is fixed.

15 10. The apparatus of claim 8 wherein if said ring connection polarity state configured at said first adjacent node is floating, said network node controller adopts a default ring connection polarity state.

11. The apparatus of claim 10 wherein if said ring connection polarity state 20 configured at said first adjacent node is floating, said second interface transmits an indication of said default ring connection polarity state to said second adjacent node along with an indication that said default ring connection polarity state is floating.

12. The apparatus of claim 10 wherein said network node controller operates said network node within said dual ring in accordance with said adopted ring connection polarity state.

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13. The apparatus of claim 12 wherein said network node operates said network node in accordance with DPT/SRP.

14. The apparatus of claim 12 wherein said first interface receives said ring connection polarity information by:

10 receiving a path trace message; and

extracting said ring connection polarity information from said path trace message.

15. Apparatus for configuring a network node that is connected in a dual ring, said apparatus comprising:

means for receiving ring connection polarity information from a first adjacent node in said dual ring, said ring connection polarity information comprising a ring connection polarity state configured at said first adjacent node and an indication whether said ring connection polarity state is fixed or floating; and

20 means for, if said ring connection polarity state configured at said first adjacent node is fixed, adopting said ring connection polarity state of said first adjacent node.

16. The apparatus of claim 15 further comprising:

means for, if said ring connection polarity state configured at said first adjacent node is fixed, transmitting said ring connection polarity information to a second adjacent node including said adopted ring connection polarity state and an indication that said 5 adopted ring connection polarity state is fixed.

17. The apparatus of claim 15 further comprising:

means for, if said ring connection polarity state configured at said first adjacent node is floating, adopting a default ring connection polarity state.

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18. The apparatus of claim 17 further comprising:

means for, if said ring connection polarity state configured at said first adjacent node is floating, transmitting an indication of said default ring connection polarity state to a second adjacent node along with an indication that said default ring connection polarity 15 state is floating.

19. The apparatus of claim 17 further comprising:

means for, operating said network node within said dual ring in accordance with said adopted ring connection polarity state.

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20. The apparatus of claim 19 wherein said means for operating said network node comprises means for operating said network node in accordance with DPT/SRP.

21. The apparatus of claim 19 wherein said means for receiving said ring connection polarity information comprises:

means for receiving a path trace message; and

5 means for extracting said ring connection polarity information from said path trace message.

22. A computer program product for configuring a network node that is connected in a dual ring, said computer program product comprising:

10 code that receives ring connection polarity information from a first adjacent node in said dual ring, said ring connection polarity information comprising a ring connection polarity state configured at said first adjacent node and an indication whether said ring connection polarity state is fixed or floating;

code that, if said ring connection polarity state configured at said first adjacent node is fixed, adopts said ring connection polarity state of said first adjacent node; and
15 a computer-readable storage medium that stores the codes.

23. The computer program product of claim 22 further comprising:

code that, if said ring connection polarity state configured at said first adjacent node is fixed, transmits said ring connection polarity information to a second adjacent node including said adopted ring connection polarity state and an indication that said adopted ring connection polarity state is fixed.
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24. The computer program product of claim 22 further comprising:
code that, if said ring connection polarity state configured at said first adjacent
node is floating, adopts a default ring connection polarity state.

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25. The computer program product of claim 24 further comprising:
code that, if said ring connection polarity state configured at said first adjacent
node is floating, transmits an indication of said default ring connection polarity state to a
second adjacent node along with an indication that said default ring connection polarity
state is floating.

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26. The computer program product of claim 24 further comprising:
code that, operates said network node within said dual ring in accordance with
said adopted ring connection polarity state.

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27. The computer program product of claim 26 wherein said code that operates said
network node comprises code that operates said network node in accordance with
DPT/SRP.

20 28. The computer program product of claim 26 wherein said code that receives said
ring connection polarity information comprises:
code that receives a path trace message; and
code that extracts said ring connection polarity information from said path trace
message.